

SEQUENCE LISTING

<110> Baum, Peter Robert
 Fanslow III, William C.
 <120> Molecules Designated LDCAM
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 <140> to be assigned--
 <141> 2001-02-06
 <140> PCT/US99/17905
 <141> 1999-08-05
 <150> 60/095,672
 <151> 1998-08-07
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Ala	Pro	Pro	Gly	Leu									
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ctg	ctg	tgc	ctc	tcc	gcc	gct	atc	ccc	aca	ggt	gat	ggg	147
Leu	Leu	Leu	Phe	Ser	Ala	Ala	Ala	Ile	Pro	Thr	Gly	Asp	
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cag	aat	ctg	ttt	acg	aaa	gac	gtg	aca	gtg	atc	gag	gga	gag	gtt	gct	195
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acc	atc	agt	tgc	caa	gtc	aat	aag	agt	gac	gac	tct	gtg	att	cag	cta	243
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ctg	aat	ccc	aac	agg	cag	acc	att	tat	tcc	agg	gac	tcc	egg	cct	ttg	291
Leu	Asn	Pro	Asn	Arg	Gln	Thr	Ile	Tyr	Phe	Arg	Asp	Phe	Arg	Pro	Leu	
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aag	gac	agc	agg	ttt	cag	ttg	ctg	aat	ttt	tct	agc	agt	gaa	ctc	aaa	339
Lys	Asp	Ser	Arg	Phe	Gln	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu	Lys	
95						100							105			

gta	tca	ttg	aca	aac	gtc	tca	att	tct	gat	gaa	gga	aga	tac	ttt	tgc	387
Val	Ser	Leu	Thr	Asn	Val	Ser	Ile	Ser	Asp	Glu	Gly	Arg	Tyr	Phe	Cys	
110					115				120							

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cca gcc acg act atc agg tgg ttc aaa ggg aac aca gag cta aaa ggc Pro Ala Thr Thr Ile Arg Trp Phe Lys Gly Asn Thr Glu Leu Lys Gly 175 180 185 185	579
aaa tcg gag gtg gaa gag tgg tca gac atg tac act gtg acc agt cag Lys Ser Glu Val Glu Glu Trp Ser Asp Met Tyr Thr Val Thr Ser Gln 190 195 200 200	627
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cta caa ggc tta acc cgg gaa ggg gac gcg ctt gag tta aca tgt gaa Leu Gln Gly Leu Thr Arg Glu Gly Asp Ala Leu Glu Leu Thr Cys Glu 255 260 265 265	819
gcc atc ggg aag ccc cag cct gtg atg gta act tgg gtg aga gtc gat Ala Ile Gly Lys Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp 270 275 280 280	867
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 Gly Ala Asp Asp Ala Ala Asp Ala Asp Thr Ala Ile Ile Asn Ala Glu
 415 420 425
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 Gly Gly Gln Asn Asn Ser Glu Glu Lys Lys Glu Tyr Phe Ile
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 Gln Val Asn Lys Ser Asp Asp Ser Val Ile Gln Leu Leu Asn Pro Asn
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 Arg Gln Thr Ile Tyr Phe Arg Asp Phe Arg Pro Leu Lys Asp Ser Arg
 85 90 95
 Phe Gln Leu Leu Asn Phe Ser Ser Ser Glu Leu Lys Val Ser Leu Thr
 100 105 110
 Asn Val Ser Ile Ser Asp Glu Gly Arg Tyr Phe Cys Gln Leu Tyr Thr
 115 120 125
 Asp Pro Pro Gln Glu Ser Tyr Thr Thr Ile Thr Val Leu Val Pro Pro
 130 135 140
 Arg Asn Leu Met Ile Asp Ile Gln Lys Asp Thr Ala Val Glu Gly Glu
 145 150 155 160
 Glu Ile Glu Val Asn Cys Thr Ala Met Ala Ser Lys Pro Ala Thr Thr
 165 170 175
 Ile Arg Trp Phe Lys Gly Asn Thr Glu Leu Lys Gly Lys Ser Glu Val
 180 185 190

Glu Glu Trp Ser Asp Met Tyr Thr Val Thr Ser Gln Leu Met Leu Lys
 195 200 205
 Val His Lys Glu Asp Asp Gly Val Pro Val Ile Cys Gln Val Glu His
 210 215 220
 Pro Ala Val Thr Gly Asn Leu Gln Thr Gln Arg Tyr Leu Glu Val Gln
 225 230 235 240
 Tyr Lys Pro Gln Val His Ile Gln Met Thr Tyr Pro Leu Gln Gly Leu
 245 250 255
 Thr Arg Glu Gly Asp Ala Leu Glu Leu Thr Cys Glu Ala Ile Gly Lys
 260 265 270
 Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met Pro
 275 280 285
 Gln His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn Leu Asn
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 Lys Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn Ile Val Gly
 305 310 315 320
 Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp Pro Pro Thr Thr
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 Ile Pro Pro Pro Thr
 340 345 350
 Thr Ile Leu Thr Ile Ile Thr Asp Ser Arg Ala Gly Glu Glu Gly Ser
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 Val Phe Ala Met Leu Cys Leu Leu Ile Ile Leu Gly Arg Tyr Phe Ala
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 Arg His Lys Gly Thr Tyr Phe Thr His Glu Ala Lys Gly Ala Asp Asp
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25

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Val Asn Lys Ser Asp Asp Ser Val Ile Gln Leu Leu Asn Pro Asn Arg	
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Gln Thr Ile Tyr Phe Arg Asp Phe Arg Pro Leu Lys Asp Ser Arg Phe	
65 70 75	
cag ctg ctg aat ttt tct aac agt gaa gtc ctc aaa gtg tca ctg acg aat	286
Gln Leu Leu Asn Phe Ser Ser Glu Leu Lys Val Ser Leu Thr Asn	
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Val Ser Ile Ser Asp Glu Gly Arg Tyr Phe Cys Gln Leu Tyr Thr Asp	
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Pro Pro Gln Glu Ser Tyr Thr Ile Thr Val Leu Val Pro Pro Arg	
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Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met Pro Gln	
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His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn Leu Asn Lys	
275 280 285	
aca gat aac ggt act tac cgc tgt gag gct tcc aac ata gtg gga aag	910

Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn Ile Val Gly Lys
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 385 390 395
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Asn Lys Ser Asp Asp Ser Val Ile Gln Leu Leu Asn Pro Asn Arg Gln			
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Thr Ile Tyr Phe Arg Asp Phe Arg Pro Leu Lys Asp Ser Arg Phe Gln			
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Leu Leu Asn Phe Ser Ser Ser Glu Leu Lys Val Ser Leu Thr Asn Val			
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Ser Ile Ser Asp Glu Gly Arg Tyr Phe Cys Gln Leu Tyr Thr Asp Pro			
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Pro Gln Glu Ser Tyr Thr Ile Thr Val Leu Val Pro Pro Arg Asn			
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Leu Met Ile Asp Ile Gln Lys Asp Thr Ala Val Glu Gly Glu Glu Ile			
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Glu Val Asn Cys Thr Ala Met Ala Ser Lys Pro Ala Thr Thr Ile Arg			
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Trp Phe Lys Gly Asn Lys Glu Leu Lys Gly Lys Ser Glu Val Glu Glu			
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Trp Ser Asp Met Tyr Thr Val Thr Ser Gln Leu Met Leu Lys Val His			
180	185	190	
Lys Glu Asp Asp Gly Val Pro Val Ile Cys Gln Val Glu His Pro Ala			
195	200	205	
Val Thr Gly Asn Leu Gln Thr Gln Arg Tyr Leu Glu Val Gln Tyr Lys			
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Pro Gln Val His Ile Gln Met Thr Tyr Pro Leu Gln Gly Leu Thr Arg			
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Glu Gly Asp Ala Phe Glu Leu Thr Cys Glu Ala Ile Gly Lys Pro Gln			
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Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met Pro Gln His			
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Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn Leu Asn Lys Thr			
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His Ser Asp Tyr Met Leu Tyr Val Tyr Asp Pro Pro Thr Thr Ile Pro			
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Pro Pro Thr Ile			
325	330	335	
Leu Thr Ile Ile Thr Asp Ser Arg Ala Gly Glu Glu Gly Thr Ile Gly			
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370 375 380

Lys Gly Thr Tyr Phe Thr His Glu Ala Lys Gly Ala Asp Asp Ala Ala
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gccagcgccc agccaggagg cccggcggtt agcgcgt atg ggg gcc cca gcc gcc 174
Met Gly Ala Pro Ala Ala
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Ser Leu Leu Leu Leu Leu Leu Phe Ala Cys Cys Trp Ala Pro Gly
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Gly Ala Asn Leu Ser Gln Asp Gly Tyr Trp Gln Glu Gln Asp Leu Glu
25 30 35

ctg gga act ctg gct cca ctc gac gag gcc atc agc tcc aca gtc tgg 318
Leu Gly Thr Leu Ala Pro Leu Asp Glu Ala Ile Ser Ser Thr Val Trp
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Ser Ser Pro Asp Met Leu Ala Ser Gln Asp Ser Gln Pro Trp Thr Ser

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75	80	85		
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Lys Asp His Glu Asp Ser Ser Leu Gln Trp Ser Asn Pro Ala Gln Gln				
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Thr Leu Tyr Phe Gly Glu Lys Arg Ala Leu Arg Asp Asn Arg Ile Gln				
105	110	115		
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120	125	130		
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Ala Leu Ala Asp Glu Gly Glu Tyr Thr Cys Ser Ile Phe Thr Met Pro				
135	140	145	150	
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Val Arg Thr Ala Lys Ser Leu Val Thr Val Leu Gly Ile Pro Gln Lys				
155	160	165		
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Pro Ile Ile Thr Gly Tyr Lys Ser Ser Leu Arg Glu Lys Asp Thr Ala				
170	175	180		
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185	190	195		
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Trp Arg Lys Gly Asp Gln Glu Leu His Gly Glu Pro Thr Arg Ile Gln				
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Glu Asp Pro Asn Gly Lys Thr Phe Thr Val Ser Ser Val Thr Phe				
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Gln Val Thr Arg Glu Asp Asp Gly Ala Ser Ile Val Cys Ser Val Asn				
235	240	245		
cat gaa tct cta aag gga gct gac aga tcc acc tct caa cgc att gaa				942
His Glu Ser Leu Lys Gly Ala Asp Arg Ser Thr Ser Gln Arg Ile Glu				
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Val Leu Tyr Thr Pro Thr Ala Met Ile Arg Pro Asp Pro Pro His Pro				
265	270	275		
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Arg Glu Gly Gln Lys Leu Leu His Cys Glu Gly Arg Gly Asn Pro				
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Val Pro Gln Gln Tyr Leu Trp Glu Lys Glu Gly Ser Val Pro Pro Leu				
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Lys Met Thr Gln Glu Ser Ala Leu Ile Phe Pro Phe Leu Asn Lys Ser				
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 Lys Ala Tyr Tyr Thr Leu Asn Val Asn Asp Pro Ser Pro Val Pro Ser
 345 350 355
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 Val Phe Leu Leu Leu Ile Met Leu Ile Phe Leu Gly His Tyr Leu Ile
 375 380 385 390
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 Arg His Lys Gly Thr Tyr Leu Thr His Glu Ala Lys Gly Ser Asp Asp
 395 400 405
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 Ala Pro Asp Ala Asp Thr Ala Ile Ile Asn Ala Glu Gly Gln Ser
 410 415 420
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 Gln Glu Gln Asp Leu Glu Leu Gly Thr Leu Ala Pro Leu Asp Glu Ala
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 Ile Ser Ser Thr Val Trp Ser Ser Pro Asp Met Leu Ala Ser Gln Asp
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 Ser Gln Pro Trp Thr Ser Asp Glu Thr Val Val Ala Gly Gly Thr Val
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 Val Leu Lys Cys Gln Val Lys Asp His Glu Asp Ser Ser Leu Gln Trp
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 Ser Asn Pro Ala Gln Gln Thr Leu Tyr Phe Gly Glu Lys Arg Ala Leu
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Arg Asp Asn Arg Ile Gln Leu Val Thr Ser Thr Pro His Glu Leu Ser
 115 120 125
 Ile Ser Ile Ser Asn Val Ala Leu Ala Asp Glu Gly Glu Tyr Thr Cys
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 Ser Ile Phe Thr Met Pro Val Arg Thr Ala Lys Ser Leu Val Thr Val
 145 150 155 160
 Leu Gly Ile Pro Gln Lys Pro Ile Ile Thr Gly Tyr Lys Ser Ser Leu
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 Arg Glu Lys Asp Thr Ala Thr Leu Asn Cys Gln Ser Ser Gly Ser Lys
 180 185 190
 Pro Ala Ala Arg Leu Thr Trp Arg Lys Gly Asp Gln Glu Leu His Gly
 195 200 205
 Glu Pro Thr Arg Ile Gln Glu Asp Pro Asn Gly Lys Thr Phe Thr Val
 210 215 220
 Ser Ser Ser Val Thr Phe Gln Val Thr Arg Glu Asp Asp Gly Ala Ser
 225 230 235 240
 Ile Val Cys Ser Val Asn His Glu Ser Leu Lys Gly Ala Asp Arg Ser
 245 250 255
 Thr Ser Gln Arg Ile Glu Val Leu Tyr Thr Pro Thr Ala Met Ile Arg
 260 265 270
 Pro Asp Pro Pro His Pro Arg Glu Gly Gln Lys Leu Leu His Cys
 275 280 285
 Glu Gly Arg Gly Asn Pro Val Pro Gln Gln Tyr Leu Trp Glu Lys Glu
 290 295 300
 Gly Ser Val Pro Pro Leu Lys Met Thr Gln Glu Ser Ala Leu Ile Phe
 305 310 315 320
 Pro Phe Leu Asn Lys Ser Asp Ser Gly Thr Tyr Gly Cys Thr Ala Thr
 325 330 335
 Ser Asn Met Gly Ser Tyr Lys Ala Tyr Tyr Thr Leu Asn Val Asn Asp
 340 345 350
 Pro Ser Pro Val Pro Ser Ser Ser Thr Tyr His Ala Ile Ile Gly
 355 360 365
 Gly Ile Val Ala Phe Ile Val Phe Leu Leu Leu Ile Met Leu Ile Phe
 370 375 380
 Leu Gly His Tyr Leu Ile Arg His Lys Gly Thr Tyr Leu Thr His Glu
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 405 410 415
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 gccagcgccc agccaggagg cccggccggg agcgct atg ggg gcc cca gcc gcc 174
 Met Gly Ala Pro Ala Ala
 1 5
 tcg ctc ctc ctc ctg ctg ttc gcc tgc tgc tgg gcg ccc ggc 222
 Ser Leu Leu Leu Leu Leu Leu Phe Ala Cys Cys Trp Ala Pro Gly
 10 15 20
 ggg gcc aac ctc tcc cag gac gac agc cag ccc tgg aca tct gat gaa 270
 Gly Ala Asn Leu Ser Gln Asp Asp Ser Gln Pro Trp Thr Ser Asp Glu
 25 30 35
 aca gtg gtg gct ggt ggc acc gtg gtg ctc aag tgc caa gtg aaa gat 318
 Thr Val Val Ala Gly Gly Thr Val Val Leu Lys Cys Gln Val Lys Asp
 40 45 50
 cac gag gac tca tcc ctg cca tgg tct aac cct gct cag cag act ctc 366
 His Glu Asp Ser Ser Leu Gln Trp Ser Asn Pro Ala Gln Gln Thr Leu
 55 60 65 70
 tac ttt ggg gag aag aga gcc ctt cga gat aat cga att cag ctg gtt 414
 Tyr Phe Gly Glu Lys Arg Ala Leu Arg Asp Asn Arg Ile Gln Leu Val
 75 80 85
 acc tct acg ccc cac gag ctc agc atc agc aat gtg gcc ctg 462
 Thr Ser Thr Pro His Glu Leu Ser Ile Ser Asn Val Ala Leu
 90 95 100
 gca gac gag ggc gag tac acc tgc tca atc ttc act atg cct gtg cga 510
 Ala Asp Glu Gly Glu Tyr Thr Cys Ser Ile Phe Thr Met Pro Val Arg
 105 110 115
 act gcc aag tcc ctc gtc act gtg cta gga att cca cag aag ccc atc 558
 Thr Ala Lys Ser Leu Val Thr Val Leu Gly Ile Pro Gln Lys Pro Ile
 120 125 130
 atc act ggt tat aaa tct tca tta cgg gaa aaa gac aca gcc acc cta 606
 Ile Thr Gly Tyr Lys Ser Ser Leu Arg Glu Lys Asp Thr Ala Thr Leu
 135 140 145 150
 aac tgt cag tct tct ggg agc aag cct gca gcc cgg ctc acc tgg aga 654
 Asn Cys Gln Ser Ser Gly Ser Lys Pro Ala Ala Arg Leu Thr Trp Arg
 155 160 165
 aag ggt gac caa gaa ctc cac gga gaa cca acc cgc ata cag gaa gat 702
 Lys Gly Asp Gln Glu Leu His Gly Pro Thr Arg Ile Gln Glu Asp
 170 175 180
 ccc aat ggt aaa acc ttc act gtc agc agc tgc gtg aca ttc cag gtt 750
 Pro Asn Gly Lys Thr Phe Thr Val Ser Ser Val Thr Phe Gln Val
 185 190 195
 acc cgg gag gat gat ggg ggc agc atc gtg tgc tct gtg aac cat gaa 798
 Thr Arg Glu Asp Asp Gly Ala Ser Ile Val Cys Ser Val Asn His Glu
 200 205 210
 tct cta aag gga gct gac aga tcc acc tct caa cgc att gaa gtt tta 846

Ser Leu Lys Gly Ala Asp Arg Ser Thr Ser Gln Arg Ile Glu Val Leu	220	225	230	
215				
tac aca cca act gcg atg att agg cca gac cct ccc cat cct cgt gag				894
Tyr Thr Pro Thr Ala Met Ile Arg Pro Asp Pro Pro His Pro Arg Glu	235	240	245	
235				
ggc cag aag ctg ttg cta cac tgt gag ggt cgc ggc aat cca gtc ccc				942
Gly Gln Lys Leu Leu His Cys Glu Gly Arg Gly Asn Pro Val Pro	250	255	260	
250				
cag cag tac cta tgg gag aag gag ggc agt gtg cca ccc ctg aag atg				990
Gln Gln Tyr Leu Trp Glu Lys Glu Gly Ser Val Pro Pro Leu Lys Met	265	270	275	
265				
acc cag gag agt gcc ctg atc ttc cct ttc ctc aac aag agt gac agt				1038
Thr Gln Glu Ser Ala Leu Ile Phe Pro Phe Leu Asn Lys Ser Asp Ser	280	285	290	
280				
ggc acc tac ggc tgc aca gcc acc agc aac atg ggc agc tac aag gcc				1086
Gly Thr Tyr Gly Cys Thr Ala Thr Ser Asn Met Gly Ser Tyr Lys Ala	295	300	305	310
295				
tac tac acc ctc aat gtt aat gac ccc agt ccg gtg ccc tcc tcc tcc				1134
Tyr Tyr Thr Leu Asn Val Asn Asp Pro Ser Pro Val Pro Ser Ser	315	320	325	
315				
agc acc tac cac gcc atc atc ggt ggg atc gtg gct ttc att gtc ttc				1182
Ser Thr Tyr His Ala Ile Ile Gly Ile Val Ala Phe Ile Val Phe	330	335	340	
330				
ctg ctg ctc atc atg ctc atc ttc ctt ggc cac tac ttg atc ccg cac				1230
Leu Leu Leu Ile Met Leu Ile Phe Leu Gly His Tyr Leu Ile Arg His	345	350	355	
345				
aaa gga acc tac ctg aca cat gag gca aaa ggc tcc gac gat gct cca				1278
Lys Gly Thr Tyr Leu Thr His Glu Ala Lys Gly Ser Asp Asp Ala Pro	360	365	370	
360				
gac gcg gac acg gcc atc atc aat gca gaa ggc ggg cag tca gga ggg				1326
Asp Ala Asp Thr Ala Ile Ile Asn Ala Glu Gly Gln Ser Gly Gly	375	380	385	390
375				
gac gac aag gaa tat ttc atc tagaggccg tgcccaacttc ctgcgcggcc				1380
Asp Asp Lys Glu Tyr Phe Ile	395			
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 20 25 30
 Pro Trp Thr Ser Asp Glu Thr Val Val Ala Gly Gly Thr Val Val Leu
 35 40 45
 Lys Cys Gln Val Lys Asp His Glu Asp Ser Ser Leu Gln Trp Ser Asn
 50 55 60
 Pro Ala Gln Gln Thr Leu Tyr Phe Gly Glu Lys Arg Ala Leu Arg Asp
 65 70 75 80
 Asn Arg Ile Gln Leu Val Thr Ser Thr Pro His Glu Leu Ser Ile Ser
 85 90 95
 Ile Ser Asn Val Ala Leu Ala Asp Glu Gly Glu Tyr Thr Cys Ser Ile
 100 105 110
 Phe Thr Met Pro Val Arg Thr Ala Lys Ser Leu Val Thr Val Leu Gly
 115 120 125
 Ile Pro Gln Lys Pro Ile Ile Thr Gly Tyr Lys Ser Ser Leu Arg Glu
 130 135 140
 Lys Asp Thr Ala Thr Leu Asn Cys Gln Ser Ser Gly Ser Lys Pro Ala
 145 150 155 160
 Ala Arg Leu Thr Trp Arg Lys Gly Asp Gln Glu Leu His Gly Glu Pro
 165 170 175
 Thr Arg Ile Gln Glu Asp Pro Asn Gly Lys Thr Phe Thr Val Ser Ser
 180 185 190
 Ser Val Thr Phe Gln Val Thr Arg Glu Asp Asp Gly Ala Ser Ile Val
 195 200 205
 Cys Ser Val Asn His Glu Ser Leu Lys Gly Ala Asp Arg Ser Thr Ser
 210 215 220
 Gln Arg Ile Glu Val Leu Tyr Thr Pro Thr Ala Met Ile Arg Pro Asp
 225 230 235 240
 Pro Pro His Pro Arg Glu Gly Gln Lys Leu Leu Leu His Cys Glu Gly
 245 250 255
 Arg Gly Asn Pro Val Pro Gln Gln Tyr Leu Trp Glu Lys Glu Gly Ser
 260 265 270
 Val Pro Pro Leu Lys Met Thr Gln Glu Ser Ala Leu Ile Phe Pro Phe
 275 280 285
 Leu Asn Lys Ser Asp Ser Gly Thr Tyr Gly Cys Thr Ala Thr Ser Asn
 290 295 300
 Met Gly Ser Tyr Lys Ala Tyr Tyr Thr Leu Asn Val Asn Asp Pro Ser
 305 310 315 320
 Pro Val Pro Ser Ser Ser Thr Tyr His Ala Ile Ile Gly Gly Ile
 325 330 335
 Val Ala Phe Ile Val Phe Leu Leu Leu Ile Met Leu Ile Phe Leu Gly
 340 345 350
 His Tyr Leu Ile Arg His Lys Gly Thr Tyr Leu Thr His Glu Ala Lys

355

360

365

Gly Ser Asp Asp Ala Pro Asp Ala Asp Thr Ala Ile Ile Asn Ala Glu
370 375 380

Gly Gly Gln Ser Gly Gly Asp Asp Lys Lys Glu Tyr Phe Ile
385 390 395